8364040/2024/OP-AHF01

GOVERNMENT OF ANDHRA PRADESH

ABSTRACT

Animal Husbandry Department – New Bovine Breeding Policy- 2023 – Approved - Notification - Orders – Issued.

ANIMAL HUSBANDRY, DAIRY DEVELOPMENT & FISHERIES (AH.I) DEPARTMENT

G.O.Ms.No.41 Dated:04-10-2023

Read the following:-

1. G.O.Ms.No.9, Animal Husbandry, Dairy Development & Fisheries (AH.III) Department, dt:27.01.2005.
2. Andhra Pradesh Bovine Breeding (Regulation of Production & Sale of Bovine Semen and Artificial Insemination Services) Act, 2021 (Act No.28 of 2021).
3. G.O.Rt.No.19, AHDD&F (AH.I) Department, Dated:19.01.2023.
4. From the Director of Animal Husbandry, A.P., Vijayawada, Lr.Roc.No. AHF02-POL/3/2022-BBC, Dt:23.05.2023.
5. Government Memo.No.2097749/AH.I/A2/2023, Dated:03-08-2023.
6. From the C.E.O., APLDA, Guntur, Lr.Roc.No.3404/T5/2022, Dated:08-08-2023.

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ORDER:

In the reference first read above, Government have approved the Breeding policy for Cattle and Buffaloes in the combined State of Andhra Pradesh during the year 2005.

2. In the reference second read above, the Government have enacted the Andhra Pradesh Bovine Breeding (Regulation of Production & Sale of Bovine Semen and Artificial Insemination Services) Act, 2021 to monitor and regulate the Production & Sale of Bovine Semen and Artificial Insemination Services in the State vide Act No.28 of 2021 which came into force with effect from the 14th October, 2021.

3. In the reference third read above, the Government have issued a Notification constituting the Bovine Breeding Authority with the Members including Non-official members to exercise the powers conferred on, and perform the functions assigned to it under this Act.

4. The Director of Animal Husbandry and the C.E.O., APLDA in the references 4th and 6th read above, inter-alia have stated that one of the functions of the Bovine Breeding Authority constituted under Andhra Pradesh Bovine Breeding (Regulation of Production & Sale of Bovine Semen and Artificial Insemination Services) Act, 2021 is to formulate and implement the Bovine Breeding Policy as prescribed in the rules to be formulated in accordance with this Act. He has also stated that the CEO-APLDA, Chairman of Technical Advisory Committee has submitted the draft of new Bovine Breeding Policy-2023 and requested the Government to approve the same, to implement the cattle breeding activities throughout the State for improving the cattle and buffalo productivity in the State.

(P.T.O)

5. Government after careful examination of the matter, hereby approve the Andhra Pradesh Bovine Breeding Policy-2023 to implement the cattle breeding activities throughout the State for improving the cattle and buffalo productivity in the State.

6. Accordingly, the following Notification will be published in the Extraordinary issue of the Andhra Pradesh Gazette, Dated:04.10.2023.

NOTIFICATION

In exercise of powers conferred by section 2(h) read with section 3(2)(ii) of the Andhra Pradesh Bovine Breeding (Regulation of Production & Sale of Bovine Semen and Artificial Insemination Services) Act, 2021, Government hereby notify the Andhra PradeshBovine Breeding Policy-2023 for improving the cattle and buffalo productivity in the State by enforcement of the cattle breeding activities throughout the State. The Andhra Pradesh Bovine Breeding Policy-2023 is appended to this Notification.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

GOPAL KRISHNA DWIVEDI
SPECIAL CHIEF SECRETARY TO GOVERNMENT (FAC)

To
The Commissioner, Printing & Stationary, Andhra Pradesh, Vijayawada
(with a request to supply 100 copies of Gazette to this Department).
The Director, Animal Husbandry Department, A.P., Vijayawada.
(requested to take necessary further action in the matter accordingly).
The Chief Executive Officer, A.P. Livestock Development Agency, Guntur.
(requested to take necessary further action in the matter accordingly).
Copy to:
The Members of Bovine Breeding Authority (through Director of Animal Husbandry)
OSD to Hon'ble M(AHDD&F).
P.S. to Special Chief Secretary to Government, AHDD&F Department.
Law (E) Department.
SF/SC (Computer No.2097749).

//FORWARDED::BY::ORDER//

T. Naresh
SECTION OFFICER

(Annexure to G.O.Ms.No.41, AHDD&F (AH-I) Department, Dated:04-10-2023)

Andhra Pradesh Bovine Breeding Policy-2023

1.0 Introduction:

The Bovine Breeding Policy of Andhra Pradesh, 2023 is purely a Technical document without any financial implications on the State Exchequer. Breeding policy provides necessary direction to the breeding operations in the State and set to replace the existing Breeding Policy approved in 2005.

Ensuring the availability of sufficient quantities of milk in tune with increasing demand is a challenging task and need of the hour. In order to accomplish this task the population of High Genetic Merit (HGM) milch animals with higher yield and productivity has to be enhanced, since milk yield is linked to genetic merit.

In addition, minimizing the number of low milk yielders lowers the quantity of dung and other animal waste produced, which in turn minimizes the production of methane gas responsible for greenhouse effect and global warming.

Further, sustaining the high milk production requires availability of sufficient resources such as fodder, feed, human resources and health care and other facilities and optimal utilization of available resources, so that cost of production gets minimized resulting in enhanced profit margins to farmers and attract entrepreneurship in dairy farming.

2.0 Rationale for revising the Breeding Policy:

While revising the breeding policy as per clause ii of subsection 2 of section 3 & clause 1 of subsection 5 of section 3 of the Bovine Breeding Act, 2021 of Andhra Pradesh, efforts are made to address the changes that took place in dairy farming since 2005 in terms of enhanced demands and expectations of farmers as shown below.

- State got bifurcated and Districts were reorganized
- Connectivity within the State got improved
- New marketing opportunities were identified
- Demand for milk is ever increasing opening up export opportunities
- High demand for HGM and high yielding animals
- Novel reproductive tools became available (Sex Sorted Semen & IVF-ETT, ("Open Nucleus Breeding System",)
- Need to conserve indigenous breeds such as Ongole and Punganur was given utmost priority
- Need to curb indiscriminate breeding to restrict exotic blood levels
- Need to preserve the biodiversity and preserve disease resistance traits in crossbred native animals
- Need to promote entrepreneurship in dairy farming

3.0 Goal & Objectives:

"Enhanced milk production and conservation of indigenous breeds through systematic animal breeding".

Objectives:

1. Productivity enhancement through systematic and scientific breeding practices.
2. Conservation and propagation of indigenous cattle breed (Ongole and Punganur) without altering their unique genetic traits.
3. Utilizing the advanced reproductive tools and techniques for developing HGM nucleus herds i.e. Bulls and Bull mothers

4.0 Recommendations for Frozen Semen Usage:

SL. No	Breed for Insemination	Breed of Frozen semen Recommended
(1)	(2)	(3)
	Buffaloe	
1	All Murrah, Graded Murrah andNon-descript	Murrah
2	Other Indigenous Buffaloe Breeds like Jafarabadi,Mehasana etc.,	Pure breeding with concerned breedsemen
	Cattle	
1	Ongole, Punganur and other Indigenous Breeds	Pure breeding with concerned breedsemen
2	Jersey Cross bred Cows	Inter-Se mating with Jersey crosssemen
3	HF Cross bred Cows	Inter-Se mating with HF cross semen
4	Non-Descript cow	
	a. Short and Medium Body	Jersey Semen
	b. Heavy Body size	HF, Jersey or Ongole semen (As per farmer's choice)

5.0 Buffalo Breeding Policy:

5.1 Murrah Breed:

Up-gradation of local buffaloes for 6 generations increased the population of elite pure bred Murrah buffaloes in the State. Identification and registration of these animals builds a data base useful for traders elsewhere in the country, which can earn profits for farmers in the State and additional revenue to the State exchequer. Further, use of semen from HGM Murrah bulls with DMY of more than 4,000 Kgs per lactation with positive Genomic Breeding Value (GBV) shall be continued to upgrade ND buffaloes.

5.2 Graded Murrah

The average Lactation milk yield of the Graded Murrah ranges from 1,800 to 2,400 Kgs. Depending upon the lactation milk yield of the Graded MurrahBuffaloe, the semen with DMY of 3,000 Kgs and above, with positive Genomic Breeding Value (GBV) shall be used for up-gradation of existing Graded Murrah Buffaloes.

5.3 Non-Descript Buffaloes:

The genetic up-gradation of Non-Descript buffaloes provides scope for immediate enhancement of milk production in short time, because these buffaloes are low milk yielders ranging from 2-4 Kgs per day with more than 7% fat. Semen from bulls with DMY of 3,000 Kgs with positive Genomic Breeding Value is recommended.

5.4 Other Indigenous Buffalo Breeds:

Other indigenous buffalo breeds like Mehasana, Jafarabadi recommended depending on farmer's choice, resource availability, suitability to climatic conditions and sustainability shall be inseminated with respective purebred semen without any deviation.

6.0 Cattle Breeding Policy:

6.1 Indigenous Breeds-Ongole & Punganur:

Ongole and Punganur are the native cattle breeds' of AP known to produce A2 milk, which has market potential at national and international level. Enhancing production of A2 milk might generate higher revenue to the State. Hence, it is recommended to conserve and propagate these breeds using purebred semen of same breed by adopting "Open Nucleus Breeding System". Further, it helps in preserving the biodiversity and disease resistance traits in native population for sustaining the production.

6.2 Punganur Breed:

Unscientific breeding practices are being adopted in case of this miniature breed of cows that became popular as status symbol. Systematic breeding program is recommended to increase the population of Punganur breed as detailed below.

- Selective Artificial Insemination with Pure Punganur semen.
- Use of IVF-Embryo Transfer Technology in non-descript or other cows.
- Recommended to take up research projects to promote nucleus herds.

6.3 Non-Descript Cows:

Non-Descript cows spread around hilly areas, Rayalaseema, drought prone areas and also in plain areas shall be bred in three ways:

1. Priority shall be given to farmer's choice to inseminate these cows with pure Ongole or other Indigenous breed semen.
2. Where there is a scope to promote milk production with adequate fodder availability and marketing facilities, these animals can be inseminated with exotic semen (HF or Jersey).
3. Where there is less scope for AI, Natural Service may be encouraged.

6.4 Other Indigenous cattle Breeds: Indigenous breeds like Sahiwal, Gir, Tharparkar, Kankrej, Hallikar, Rathi, Red Sindhi available on a limited scale. These animals shall be inseminated with respective purebred semen.

6.5 Cross-bred cows (CBJY/ CBHF):

Population of these animals could be witnessed more specifically in cooler parts of the state like Chittoor, Annamayya, Sri Satya Sai and North coastal districts. Crossbred Jersey (CBJY) that exhibit better adoptability with average milkproduction of around 8.9 Kgs per day shall be inseminated with High Genetic Merit bull semen with DMY of 4,500 Kgs/lactation.

Crossbred Holstein Friesian (CBHF), with slightly higher milk yield (9.68 Kgs per day) exhibited poor conception rates and repeat breeding after 3rd or 4th lactation. These animals shall be inseminated with High Genetic Merit CBHF bull semen with DMY of 5,000 Kgs/lactation. Is further recommended that the exotic blood levels shall be restricted to less than 62.5%.

7.0 Recommendations on Interventions:

7.1 Artificial Insemination using frozen semen:

Recommended to continue the use of artificial insemination technique using frozen semen as usual.

7.2 Natural Service:

Natural service shall be limited exclusively to those areas that are inaccessible to Artificial Insemination Services or in areas where gene pool of specific breed is being promoted.

7.3 Sex Sorted Semen:

It is recommended that female population with HGM shall be enhanced by adopting and promoting Sex Sorted Semen technology on large scale to cover at least 10% of the breedable population every year. HGM bull calves born to elite animals with HGM and high DMY shall be identified and reared to meet the future needs of semen production.

7.4 In-Vitro Fertilization and Embryo Transfer technology (IVF-ETT):

IVF-ETT is recommended for faster multiplication and propagation of elite animals in short time. In view of the benefits of ET technology it shall be extended to all breeds of cattle and buffaloes depending on feasibility and facilities available to increase the population of high yielding animals. The technology shall be up-scaled in low yielding animals based on need.

8.0 Establishment of Elite bull semen bank:

It is recommended that elite bull semen bank shall be established for all breeds of cattle and buffaloes existing in the State, depending on feasibility, because semen from outstanding performers in the field can be preserved for future use and the benefits can be perpetuated.

9.0 Capacity Building of Stakeholders:

It is recommended that capacity building of all the stakeholders involved in breed improvement activities shall be given top priority through pertinent trainings, seminars, group discussions and field visits etc., for sustained outcomes from implementing the policy.

10.0 Expected Outcomes of the Policy:

The revised breeding policy is expected to result in the following outcomes.

- Breeding operations in the State will be streamlined
- Native breeds of cattle are conserved
- Biodiversity is promoted so as to maintain disease resistance traits
- Milk production is sustained
- Indiscriminate cross breeding can be curbed
- Exotic blood levels are restricted in the crossbred animals
- Increase the productivity of the native animals
- Increase the population of High Genetic Merit with higher yield
- Increase the overall milk production in the State
- Improved breeding technologies and tools will be put to use
- Meets the area specific breeding needs of the farmers
- Increase in the human resources required to sustain dairy production
- Inculcating the habit of milk recording and elite animal registration
- Establishment of Semen Bank with semen from identified elite bulls

GOPAL KRISHNA DWIVEDI
SPECIAL CHIEF SECRETARY TO GOVERNMENT (FAC)